# PATENT ABSTRACTS OF JAPAN

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## (54) SKIN CARE COSMETIC

## (57) Abstract:

PURPOSE: To obtain a skin care cosmetic excellent in oil resistance, water resistance and make-up durability and capable of applying a smooth touch to the skin.

CONSTITUTION: This skin care cosmetic contains short fibers having 0.1 to 5mm, preferably 0.1 to 0.7 mm length. As the short fiber, a natural fiber, a chemical fiber and a synthetic fiber are exemplified and a polyamide fiber is preferably used because of its excellent usability. The size of the short fiber is preferably 0.1 to 20 denier, preferably 0.1 to 1.2 denier. The amount mixed in a cosmetic is preferably 0.1 to 10wt.%, preferably 0.5 to 5wt.%.

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### CLAIMS.

[Claim(s)]

[Claim 1] Skin cosmetics which come to blend a staple fiber with a die length of 0.1-5mm.

[Claim 2] Skin cosmetics according to claim 1 whose size of a staple fiber is 0.1-20 deniers [claim 3] Skin cosmetics according to claim 1 or 2 whose loadings of a staple fiber are 0.1 - 10 % of the weight [claim 4] Skin cosmetics given in either of claims 1, 2, and 3 whose staple fibers are polycapramide (6-nylon) [0001]

[Translation done.]

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#### DETAILED DESCRIPTION

[Detailed Description of the Invention]

[Industrial Application] It is characterized by this invention blending a staple fiber with a die length of 0.1-5mm, and excels in a water resisting property and oilproof, and it is good, and there is no stickiness to the skin, a smooth feel is given, and makeup \*\*\*\* is related with new skin cosmetics with usability with sufficient mileage.

[0002]

[Description of the Prior Art] In order to improve makeup \*\*\*\* and to give a smooth feel to the skin in skin cosmetics, such as a milky lotion, a cream, and foundation, conventionally, blending cellulose powder, such as inorganic powder, such as talc, and porous spherical cellulose powder (referring to JP,61-189210,A) or natural hemp cellulose crystal powder, is performed. However, although a smooth feel is acquired to some extent by blending inorganic powder, mileage worsens or there are problems, such as becoming easy to solidify. moreover, the above -- since what is obtained from regenerated celluloses, such as cellulose acetate, in the approach of blending porous spherical cellulose powder given in an official report is used, there is a problem that absorption of sebum or sweat is not enough etc. Moreover, although a smooth feel is acquired to some extent by blending the cellulose crystal powder of natural hemp, there are problems, such as being a little sticky. On the other hand, it excels in the reinforcement effectiveness of a pawl make homogeneity distribute and come to contain the cosmetics (JP,62-238211,A) and the amount of specification of a staple fiber which has the massage effectiveness with the cleansing cream effectiveness which comes to distribute the coarse-grinding object of floc which consists of a staple fiber, hydrophilic fine particles, and a water-insoluble nature giant molecule to an aquosity basis, and it is applied for the nail enamel (JP,03-101611,A) which produces neither spreading unevenness, such as irregularity, nor the stacking tendency of reinforcement as an example which blended the staple fiber with cosmetics. However, by adding a single fiber to skin cosmetics, each of these is excellent in a water resisting property and oilproof, and makeup \*\*\*\* is good and they differs from the main point of this application of developing the skin cosmetics which give a smooth feel.

[0003]

[Means for Solving the Problem] As a result of examining many things that said trouble should be solved, by blending a staple fiber with a die length of 0.1-5mm, this invention is excellent in a water resisting property or oilproof, makeup \*\*\*\* is good, and gives a smooth feel to the skin, and moreover it is not sticky, and came to develop new skin cosmetics also with good stability.

[0004] As a staple fiber used for this invention, synthetic fibers, such as natural fibers, such as cotton, wool, silk, and hemp, rayon, the chemical fiber for acetate, a polyester system, a polyamide system, acrylic, a polyolefine system, a polyvinyl chloride system, and a polyvinyl alcohol system, etc. can be mentioned. In these, since the polyamide system is more excellent in usability, it is the most desirable. In addition, with the staple fiber said on these descriptions, the usual single fiber, a bicomponent fiber, and yarn are included.

[0005] If the die length of a staple fiber is too short, makeup \*\*\*\* will worsen, if too long, the lightness

and concordance of mileage will worsen, and even if too long and too short, the smoothness of a feel worsens. moreover -- if too long -- a staple fiber group -- tangling -- as -- things -- \*\*\*\* -- distributing -- being hard -- since it is coiled and attached to an agitator at the time of manufacture, it is not practical. The die length of the staple fiber used for this invention from this reason is 0.1-0.7mm preferably 0.1-5mm. Even if the size of a staple fiber is too thick and it is too thin, the smoothness of a feel stops being able to come out of it easily. Moreover, since it will be got blocked in an agitator at the time of manufacture if it will tangle if too thin, it becomes \*\*\*\*-like, and is hard coming to distribute at the time of manufacture uniformly and becomes thick too much, it is not practical. 0.1-20 deniers is desirable still more desirable, and the size of the staple fiber used for this invention from this reason is 0.1-1.2 deniers.

[0006] As for the most desirable polyamide system staple fiber used for this invention, various things about die length and thickness are put on the market from Toray Industries, Inc. and Unitika, Ltd. under the name of the "nylon fiber." After carrying out melt spinning of the polycapramide (6-nylon) to which ring opening polymerization of the epsilon caprolactam was carried out, beating of the "nylon fiber" is carried out.

[0007] In this invention, 0.1 - 10 % of the weight in the skin cosmetics whole quantity is desirable still more desirable, and the blending ratio of coal of a staple fiber is 0.5 - 5 % of the weight.
[0008] Components usually used for skin cosmetics, such as an oil content, water, a surfactant, a moisturizer, lower alcohol, a thickener, perfume, an antioxidant, a chelating agent, coloring matter, and antiseptics, can be blended with the skin cosmetics of this invention.
[0009]

[Function] When the skin cosmetics of this invention blend die-length a staple fiber of 0.1-5mm, it excels in a water resisting property and oilproof, and makeup \*\*\*\* is good, and gives a smooth feel to the skin, moreover it is not sticky, and stability will also become good.

[0010]

[Example] Next, thereby, this invention which gives an example and explains this invention to a detail more is not limited. All loadings are weight %s.

Example 1 Oil-in-water type emulsification lotion (loadings)

(1) P.O.E (20) behenyl ether 2.4 (2) sorbitan monopalmitate 1.6 (3) palmitic-acid isostearyl 5.0 (4) myristic-acid isopropyl 3.0 (5) anhydrous lanolin 1.5 (6) stearin acid 1.0 (7) cetanols 1.0 (8) Yellow bees wax 2.0 (9) Paraffin wax (135F") 2.0 (10) spermaceti wax 2.0 (11) Para methoxycinnamic acid 2-ethylhexyl 0.5 (12) methylparaben 0.1 (13) butylparaben 0.1 (14) boraxes 0.5 (15) Carboxyvinyl polymer (2% water solution) 12.0 (16) propylene glycols 10.0 (17) purified-water remainder (18) ethanol 10.0 nylon fiber (19 (Unitika, Ltd. and \*\* -- merit --)) 0.3mm, size 0.5 denier 2.0 (20) potassium hydroxides 0.25 (21) perfume 0.2 [0011] (Manufacturing method) (1) The heating dissolution of - (13) is carried out at 80 degrees C (let this be the A section). Moreover, in addition, the thing which homogeneity was made to distribute is added, stirring (19) (18) to what carried out the heating dissolution of (14) - (17) at 82 degrees C (let this be the B section). (20) is dissolved in (21) (let this be the C section). In addition to the B section, stirring emulsification is carried out, stirring the A section. If the C section and perfume are furthermore added and it finishes adding, stirring cooling will be continued, and it cools to a room temperature. An after [ neglect degassing ] container is filled up. [0012]

Example 2 Oil-in-water type foundation (loadings)

(1) Stearin acid 2.4 (2) monostearin acid propylene glycol 2.0 (3) cetostearyl alcohol 0.2 (4) liquefied lanolin 2.0 (5) liquid paraffins 3.0 (6) myristic-acid isopropyl 8.5 (7) Propyl parahydroxybenzoate Optimum dose (8) Purified water Remainder (9) carboxymethylcellulose sodium 0.2 (10) bentonites 0.5 (11) propylene glycols 4.0 (12) nylon fiber (in the Unitika, Ltd. make and length) 1mm, 1.5 deniers of sizes 1.0 (13) ethanol 10.0 (14) triethanolamines 1.5 (15) Purified water 10.0 (16) methyl parahydroxybenzoate Optimum dose (17) titanium oxide 8.0 (18) talc 4.0 (19) color pigments Optimum dose (20) perfume Optimum dose [0013] (Manufacturing method) (17) - (19) is mixed and ground. (8) is heated at 70 degrees C and it is (10). (16) is added and melted to this which is easy to add and carries

out humidity and which adds and melts to this (9) (11) was made to distribute beforehand (let this be the A section). (1) - (7) is mixed and the heating dissolution is carried out at 70-80 degrees C, and stirring (12) to (13), in addition, since homogeneity is distributed, it adds (let this be the B section). (14) is dissolved in (15) (let this be the C section). (17) It adds stirring the preferential grinding object of - (19) in the A section. It is made to emulsify in addition, stirring the B section which heats a colloid mill at 75 degrees C through and after that and which was heated at 80 degrees C at this, if it finishes adding. Stirring cooling is carried out until it furthermore adds perfume and the C section and becomes a room temperature. [0014]

Example 3 Oil-in-water type cream (1) stearin acid 10.0 (2) stearyl alcohol 4.0 (3) butyl stearates 8.0 (4) glyceryl monostearate (self-emulsification mold) 2.0 (5) perfume 1.0 (6) antiseptics Optimum dose (7) antioxidants Optimum dose (8) propylene glycols 10.0 (9) glycerols 4.0 (10) potassium hydroxides 0.5 (11) purified water Remainder (12) ethanol 10.0 (13) wool impalpable powder (die length of 0.5mm, 10 deniers of sizes) 0.5 [0015] (Manufacturing method) (8), (9), and (10) are added to (11), and it dissolves in it, and keeps at 70 degrees C (let this be the A section). Moreover, (1) - (7) is mixed, the heating dissolution is carried out, and it keeps at 70 degrees C (let this be the B section). Stirring (13) to (12), in addition, since homogeneity is distributed, after in addition to the A section adding the B section gradually and finishing adding all into [ to stir ] this, it stirs for a while and reaction emulsification is advanced. It emulsifies to homogeneity using a homomixer after that, and cools to 30 degrees C with stirring well.

[0016]

Example 4 Water-in-oil type cream (1) paraffin 2.0 (2) micro crystallin wax 9.0 (3) yellow bees wax 3.0 (4) vaseline 5.0 (5) reduction lanolin 8.0 (6) squalane 34.0 (7) hexadecyl adipate 10.0 (8) lipophilic-type mono-oleic acid glycerol 3.5 (9) polyoxyethylene sorbitan Mono-oleate (20E.O) 1.0 (10) Perfume 0.5 (11) antioxidant optimum dose (12) antiseptics Optimum dose (13) propylene glycols 2.0 (14) purified water remainder (15) potassium hydroxides 0.2 (16) nylon fiber (the Unitika, Ltd. make, die length 0.3mm, 0.5 deniers of sizes) 5.0 [0017] (Manufacturing method) In addition, it considers as a uniform solution, stirring (15) to (14). Furthermore, what distributed (16) to homogeneity is added and heated to (13), and it is made 70 degrees C. (Let this be the A section) . (1) Although - (12) was mixed, the heating dissolution was carried out and it was made 70 degrees C, the A section is added to inside and preliminary emulsification is performed, and it emulsifies to homogeneity by the homomixer, and is made 30 degrees C by the heat exchanger.

Example 5 Water-in-oil type emulsification foundation (loadings)

(1) Decamethyl cyclopentasiloxane 17.0 (2) dimethylpolysiloxane 3.0 (3) polyoxyalkylene denaturation organopolysiloxane 4.0 (4) perfume 0.05 (5) dextrin fatty-acid-ester processing powder 20.0 (6) methylparaben 0.15 (7) 1.3-butylene glycol 5.0 (8) Ion exchange water Remainder (9) potassium hydroxides 0.1 (10) nylon fiber (the Unitika, Ltd. make, die length 1mm, 3 deniers of sizes) 3.0 (11) ethanol 10.0 [0019] (Manufacturing method) (1) The stirring dissolution of - (4) is carried out at 70 degrees C - 80 degrees C, and after adding (5) to this and distributing it, it cools to a room temperature (let this be the A section). In addition, homogeneity is distributed, stirring (10) to (11). (6) and (7) are dissolved into [ which makes / be / it / under / of (8) which melted (9) / adding / this a uniform solution ] this (let this be the B section). Water-in-oil type emulsification foundation was obtained by making the A section add and emulsify the B section. In addition, according to the approach given in JP,62-205165,A, the dextrin fatty-acid-ester processing powder used here deliquored the raw material powder mixture which mixed the kaolin 6 section and the titanium 4 section after addition and stirring in the 5-% of the weight Isopar E (exon chemistry) solution of dextrin fatty acid ester, dried and ground it in it, and obtained it in it.

[0020] Extraction of the staple fiber (nylon fiber -) of example of comparison 1 example 1 was carried out, the remainder was replaced with ion exchange water, and others obtained oil-in-water type emulsification cosmetics like the example 1.

[0021] The staple fiber (nylon fiber -) of example of comparison 2 example 1 was replaced with talc, and also oil-in-water type emulsification cosmetics were obtained like the example 1.

[0022] The staple fiber (nylon fiber -) of example of comparison 3 example 1 was replaced with the spherical cellulose, and also oil-in-water type emulsification cosmetics were obtained like the example 1.

[0023] Transposing to the staple fiber (nylon fiber -) of the die length which showed the staple fiber (nylon fiber -) of example 6 example 1 in a table 2, others obtained oil-in-water type emulsification cosmetics like the example 1.

[0024] Transposing to the staple fiber (nylon fiber -) of the size which showed the staple fiber (nylon fiber -) of example 7 example 1 in a table 3, others obtained oil-in-water type emulsification cosmetics like the example 1.

[0025] Transposing to the loadings which showed the loadings of the staple fiber (nylon fiber -) of example 8 example 1 in a table 4, others obtained oil-in-water type emulsification cosmetics like the example 1.

[0026] The organoleptics to the usability of the cosmetics obtained in the fitness-for-use test examples 1, 6, 7, and 8 and the examples 1, 2, and 3 of a comparison were performed using 30 persons' panel. The assessment approach performed very good good assessment of four steps of usually bad things to the examined sample. it is made to evaluate on 30 persons' panel, and very good -- it is alike and ten points are good -- it is alike and seven points of five points are ordinarily bad -- it was alike, two points were given and the average mark of 30 persons was displayed as follows.

[0027] 8-10 points Below O6-8 point Below below O4-6 point \*\*4 point x [0028] Consequently, a result as shown in the following table 1, a table 2, a table 3, and a table 4 was brought. however, the score in here -- O= -- very good O= -- good \*\*= -- usually -- x= -- it was presupposed that it is bad.

[A table 1]					
	実施例1	比較例 1	比較例 2	比較例3	
のびが軽い	0	0	×	0	
なじみが良い	0		Δ	×	
なめらかな	©	×	0	0	
べたつきがない	0	0	Δ	×	
化粧持ちが 良い	0	×	0	Δ	

[A table 2]

* A					
<b></b> ₩ B	0.05	0.1	2. 0	5. 0	10.0
のびが軽い	0	0	0	0	×
なじみが良い	0	0	0	0	×
なめらかな感触がある	×	0	©	0	×
べたつきがない	0	0	0	0	0
化粧持ちが 良い	×	0	©	0	,O

\*A:短纖維の長さ (mm)

※B:評価項目

[A table 3]

* A					
<b></b> *B	0.05	0.1	1. 0	20.0	40.0
のびが軽い	, 0	0	0	0	0
なじみが良い	0	0	0	0 -	0
なめらかな感触がある	Δ	©	©	0	Δ
べたつきがない	0	0	0	0	0
化粧持ちが 良い	0	©	0	<b>©</b> .	. 0

\*A:短繊維の太さ(デニール)

※B:評価項目

[A table 4]

* A.					
<b>ж</b> в	0.05	0. 1	1. 0	10.0	20.0
のびが軽い	Δ	0	0	0	Δ
なじみが良い	Δ	0	0	0	Δ
なめらかな 感触がある	0	0	0	0	0
べたつきがない	0	0	0	. 0	0
化粧持ちが 良い	0	0	0	©	0

\*A:短繊維の配合量 (重量%)

※B:評価項目

[0029] As shown in tables 1-4, when the cosmetics which blended die length of 0.1-5mm and the staple fiber of 0.1-20 deniers of sizes 0.1 to 10.0% of the weight are used, it can check that makeup \*\*\*\* is good and has given the smooth feel to the skin by having brought the result that a score is high and blending a staple fiber with cosmetics compared with the case where the cosmetics which are not blended are used.

[0030]

[Effect of the Invention] The skin cosmetics of this invention are the new skin cosmetics which were excellent in oilproof and a water resisting property, makeup \*\*\*\* is good, and there is no stickiness to the skin, gave the smooth feel, and had usability with sufficient mileage.

[Translation done.]